Appl. No. 10/601,513
Amdt. Dated January 4, 2005
Reply to Office Action of October 4, 2004

Docket No. CM05315G
Customer No.. 22917

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A method for dynamically determining a community of entities in a communications system having a plurality of entities, said method comprising the steps of:

determining the location of at least a portion of said plurality of entities within a first coverage area;

computing an entity density function for a plurality of density calculation zones within said first coverage area as a function of the determined location of said entities;

detecting that a predetermined proximity density threshold has been exceeded in at least one said density calculation zone;

generating a list of entities that are in proximity to the density calculation zone within which the proximity density threshold was exceeded; and

determining whether at least one community can be defined comprising at least two entities from said list.

2. (original) The method of Claim 1 further comprising the step of defining at least one community comprising at least two entities from said list.

3. (original) The method of Claim 2 further comprising the step of sending default community information to each entity in each said defined community.

4. (original) The method of Claim 2, wherein said defined community is a talk group.

5. (original) The method of Claim 2, wherein said defined community is a multicast list.

Appl. No. 10/601,513
Amdt. Dated January 4, 2005
Reply to Office Action of October 4, 2004

Docket No. CM05315G
Customer No.. 22917

6.   (original) The method of Claim 1, wherein said step of determining whether a community can be established comprises determining whether at least two entities from said list are authorized to join said community.

7.   (original) The method of Claim 1 further comprising the steps of:

defining at least one preliminary community comprising at least two entities from said list; and

enabling each said preliminary community to be modified.

8.   (original) The method of Claim 1, wherein said step of determining whether a community can be established comprises determining whether at least two entities from said list have at least one common predetermined communications capability.

9.   (original) The method of Claim 8, wherein said common predetermined communications capability is a common preferred media capability.

10.   (original) The method of Claim 1, wherein said list comprises entities that are located within the density calculation zone for which the proximity density threshold was exceeded.

11.   (original) The method of Claim 1, wherein said list comprises entities that are located within a predetermined radius of the density calculation zone for which the proximity density threshold was exceeded.

12.   (original) The method of Claim 1, wherein each said density calculation zone comprises a portion of said first coverage area and said density calculation zones have overlapping coverage areas.

13.   (original) The method of Claim 1, wherein each said density calculation zone comprises uniform sized portions of said first coverage area.

Appl. No. 10/601,513
Amdt. Dated January 4, 2005
Reply to Office Action of October 4, 2004

Docket No. CM05315G
Customer No.. 22917

14.   (original) The method of Claim 1, wherein the entity density computation for each said density calculation zone comprises determining the number of entities located within said density calculation zone.

15.   (original) The method of Claim 1, wherein said proximity density threshold is statically configured.

16.   (original) The method of Claim 1, wherein said proximity density threshold is dynamically determined.

17.   (original) The method of Claim 1, wherein said step of determining whether a community can be established is based on user preference.

18.   (new) A method for dynamically determining a community of entities in a communications system having a plurality of entities, said method comprising the steps of:

determining the location of at least a portion of said plurality of entities within a first coverage area;

computing an entity density function for a plurality of density calculation zones within said first coverage area as a function of the determined location of said entities, wherein the entity density computation for each said density calculation zone comprises determining the number of entities located within said density calculation zone;

detecting that a predetermined proximity density threshold has been exceeded in at least one said density calculation zone;

generating a list of entities that are in proximity to the density calculation zone within which the proximity density threshold was exceeded; and

determining whether at least one community can be defined comprising at least two entities from said list.